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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/014,901

12/14/2001

Viet-Hung Phan

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SANDRA BEAUCHESNE

Ericsson Canada Inc.

Patent Department (LMC/UP)

8400 Decarie Blvd.

Town Mount Royal, QC H4P 2N2

CANADA

EXAMINER

ROCHE, TRENTON J

ART UNIT

PAPER NUMBER

2124

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/014,901

Applicant(s)

PHAN, VIET-HUNG

Examiner

Trent J Roche

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12142001.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is responsive to communications filed 14 December 2001.
2. Claims 1-20 have been examined.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6, 8 and 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 contains the trademark/trade names Microsoft Windows™ and UNIX™. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. Note MPEP 2173.05(u). In the present case, the trademark/trade name is used to identify/describe operating systems falling under the names of Microsoft Windows™ and UNIX™. It is noted that several substantially different versions of these operating systems exist and, accordingly, the identification/description is indefinite. Similar reasoning is applied to claim 8, which

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recites the trademark/trade name UML™, and claim 10, which recites the trademark/trade names Java™, Visual Basic™, Quick Basic™ and Delphi™.

5. Claim 6 recites the limitation "the OS" in line 1. There is insufficient antecedent basis for this limitation in the claim. For purposes of examination this claim is interpreted to be dependent on claim 5, rather than claim 4.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1-5, 7, 8 and 10-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,199,195 to Goodwin et al, hereafter referred to as Goodwin.

Per claim 1:

Goodwin discloses:

- a method for constructing a software application from a model representation (Note Figure 2 and the corresponding sections of the disclosure)
- reading the model representation ("The unified models and the system definition are provided as inputs..." in col. 6 lines 20-21)

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- identifying in the model representation a plurality of software modules (“This can either be a class, package, subclass, or any other unified model-defined object” in col. 8 lines 7-9)
- identifying a programming language for each one of the plurality of software modules (“the code generator can support the creation of, for example, IDL, JAVA or C++ files...” in col. 13 lines 52-53)
- compiling each one of the plurality of software modules into machine language using a software compiler, the software compiler corresponding to the identifier programming language (“These ‘*.java’ files are compiled...” in col. 14 line 16)
- linking the compiled plurality of software modules into the software application (“output from the code generator can be combined with other user defined codes to create an application” in col. 13 lines 65-67)

substantially as claimed.

Per claim 2:

The rejection of claim 1 is incorporated, and further, Goodwin discloses reading the model representation from one or more electronic files as claimed (Note Figure 5, item 504 and the corresponding section of the disclosure)

Per claim 3:

The rejection of claim 1 is incorporated, and further, Goodwin discloses identifying a destination platform to the software application as claimed (Note Figure 2, item 208 and the corresponding section of the disclosure)

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Per claim 4:

The rejection of claim 3 is incorporated, and further, Goodwin discloses the machine language being compatible with the identified destination platform as claimed Note Figure 2, item 208 and the corresponding section of the disclosure. The machine language produced is inherently compatible.)

Per claim 5:

The rejection of claim 3 is incorporated, and further, Goodwin discloses a processor architecture and an Operating System as claimed (Note Figure 1 and the corresponding sections of the disclosure. An operating system is inherently present so that the machine may operate.)

Per claim 7:

The rejection of claim 1 is incorporated, and further, Goodwin discloses the model representation being a graphical representation as claimed (“graphically associate meta data objects” in col. 13 line 1)

Per claim 8:

The rejection of claim 7 is incorporated, and further, Goodwin discloses the Unified Modeling Language (UML) symbolic representation as claimed (“Unified Modeling Language (UML)...” in col. 6 lines 43-44)

Per claim 10:

The rejection of claim 1 is incorporated, and further, Goodwin discloses the identified programming language being one of Java, C/C++, Ada, ALGOL, Assembly, COBOL, FORTRAN, Pascal, Perl,

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PL/I, Basic and family (Visual Basic, Quick Basic), PHP, ASP, Delphi, SQL, CGI, XML, HTML, WAP or a proprietary programming language as claimed (“JAVA OR C++ files...” in col. 13 line 53)

Per claim 11:

The rejection of claim 1 is incorporated, and further, Goodwin discloses generating the corresponding source code as claimed (Note Figure 2 and the corresponding sections of the disclosure)

Per claim 12:

The rejection of claim 11 is incorporated, and further, Goodwin discloses compiling the generated source code as claimed (“These ‘.java’ files are compiled...” in col. 14 line 16)

Per claim 13:

The rejection of claim 1 is incorporated, and further, Goodwin discloses a software compiler corresponding to the identified programming language being used as claimed (“These ‘.java’ files are compiled...” in col. 14 line 16. The corresponding Java compiler is inherently used.)

Per claim 14:

The rejection of claim 1 is incorporated, and further, Goodwin discloses the software compiler being a complete independent software application as claimed (Note Figure 4, item labeled “Java C” which is the Java compiler. The compiler is independent of the VM.)

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Per claim 15:

The rejection of claim 1 is incorporated, and further, Goodwin discloses the software compiler being an incorporated software application as claimed (Note Figure 4, item labeled “Java C” which is the Java compiler. The compiler is a software application incorporated into the operating environment required to run the compiler.)

8. Claims 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication 2004/0040011 A1 to Bosworth et al, hereafter referred to as Bosworth.

Per claim 16:

Bosworth discloses:

- a tool for constructing a software application, the tool comprising an interpreting module for identifying a plurality of programming languages in a source code listing (“code sections of different programming languages, and with the assistance of language specific processing units be able to handle and facilitate execution of these code sections of different programming languages” in paragraph 0025)
- a calling module for compiling the source code listing into machine language (“instantiating a declared processing method or an instance variable, as declared...” in paragraph 0069. The source code must have been compiled to be processed and have variables instantiated.)

substantially as claimed.

Per claim 17:

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The rejection of claim 16 is incorporated, and further, Bosworth discloses the source code listing being contiguous or separated into multiple parts as claimed (Note Figure 4 and the corresponding sections of the disclosure)

Per claim 18:

The rejection of claim 16 is incorporated, and further, Bosworth discloses using a plurality of appropriate software compilers for compiling each one of the plurality of programming languages as claimed (“the Java specific processing unit...” in paragraph 0054)

Per claim 19:

The rejection of claim 18 is incorporated, and further, Bosworth discloses the software compilers being complete independent software applications as claimed (“the Java specific processing unit...” in paragraph 0054)

Per claim 20:

The rejection of claim 16 is incorporated, and further, Bosworth discloses the software compilers being incorporated software applications as claimed (“the Java specific processing unit...” in paragraph 0054. The compiler is a software application incorporated into the operating environment required to run the compiler.)

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,199,195 to Goodwin et al, hereafter referred to as Goodwin.

Per claim 6:

The rejection of claim 5 is incorporated, and further Goodwin does not explicitly mention the OS being one of Microsoft Windows, UNIX, Linux, a real-time OS or a proprietary OS. The applicant states that the OS can be any proprietary OS, thereby disclosing that the OS can be any kind of OS. It would be obvious to one of ordinary skill in the art at the time the invention was made to utilize a propriety OS as the OS utilized in the system disclosed by Goodwin. It would have been obvious to one of ordinary skill in the art at the time the invention was made to choose a propriety OS for the system disclosed by Goodwin as a user would attempt to match a propriety OS to the requirements of the system environment.

11. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,199,195 to Goodwin et al, hereafter referred to as Goodwin, in view of U.S. Patent 6,681,383 to Pastor et al, hereafter referred to as Pastor.

Per claim 9:

The rejection of claim 1 is incorporated, and further, Goodwin does not explicitly mention the model representation being a textual representation. Pastor discloses in an analogous automatic

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software production system a textual representation as claimed (“generate a textual system representation...” in col. 20 lines 9-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a textual representation in the models disclosed by Goodwin, as this textual representation would be capable of being a solid system documentation for the system, as disclosed in Pastor in col. 20 lines 12-16)

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trent J Roche whose telephone number is (571)272-3733. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571)272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Trent J Roche
Examiner

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TJR

Kakali Chaki
KAKALI CHAKI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100